BIOLOGICAL RESOURCES ASSESSMENT

for

791 Latigo Canyon Road
Malibu, CA

APN 4464-010-012

Prepared by

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INTRODUCTION

The purpose of this report is to provide technical information on biological resources for the purpose of an environmental review of a proposed single-family residence on the vacant property located at 791 Latigo Canyon Road near the incorporated City of Malibu (APN 4464-010-012). The findings contained herein are based on: a review of the *Los Angeles County Malibu Local Coastal Program*; a review of the California Department of Fish and Game Natural Heritage Division *Natural Diversity Data Base* (2010 edition), inclusive of the Point Dume, Malibu Beach, Triunfo Pass, Calabasas, Thousand Oaks and Newbury Park USGS 7.5 minute quadrangles; a review of the California Native Plant Society's online *Inventory of Rare and Endangered Vascular Plants of California* (October 2010); a pedestrian site survey conducted on October 15, 2010; base topography and site plan information provided by the applicant; and, professional intuition gained over 36 years of consulting experience. All work efforts contributing to the preparation of this report were performed by Steven G. Nelson, Consulting Biologist.

CHARACTERISTICS OF THE SITE

Physical Characteristics

Location

The project site is located on the south flank of the Santa Monica Mountains within the watershed of an unnamed tributary to the Zuma Canyon drainage. The USGS map location of the site is described as occupying a portion of the Point Dume 7.5-minute quadrangle, Range 18W, Township 1S, in the southwestern corner of Section 7.

Watershed Boundaries and Drainage Patterns

The site is located on a topographic feature separating two unnamed tributaries in the upper portion of the Zuma Canyon watershed. The entire site drains steeply to the southwest eventually into an unnamed drainage which lies approximately 700 linear feet to the southwest. There are no blue-line or otherwise discernible drainage features on the property.

Soils, Landforms and Geologic Features

The project site occupies a portion of a southwesterly-facing slope. Elevations on the property range from approximately 2,000 feet above mean sea level along Latigo Canyon Road along the northeastern border of the property to approximately 1,900 feet above mean sea level along the southwest border. There are no significant landforms or geologic features which otherwise stand out from the surrounding area; nor are there any known unique soil formations found on site.

Biological Resources

Vegetation

Historically, due to the steep hillside character of the site, it is believed to have supported chaparral over its entire extent. However, the entire property was cleared within the past two to three years to accommodate geotechnical testing and fuel modification within 150 feet of Latigo Canyon Road and 200 feet of existing single-family residences immediately to the northeast and southwest of the property.

Based on the site investigation, no evidence of recent wild fires on site was found (i.e., the presence of ash or scorched soil surfaces or charred trunks and branches among living vegetation). A description of the vegetation found on site follows. Representative site photographs are provided in Attachment A.

As mentioned above, vegetation clearing has occurred over the entire property as a result of geotechnical testing and required fuel modofication. As a consequence, the predominant vegetation over the site consists of **non-native ruderal vegetation** that is characteristic of disturbed surface soils. Dominant species on site are, Mediterranean mustard (*Hirschfeldia incana*), ripgut grass (*Bromus diandrus*), foxtail chess (*Bromus madretensis*), wild oats (*Avena sp.*), and red-stemmed filaree (*Erodium cicutarium*). Localized areas of bare ground are also present here, as are native shrubs that are resprouting from root crowns and seeds. These include deer weed (*Lotus scoparious*) and chamise (*Adenostoma fasciculatum*).

There are no native trees located on the site; nor do any oak tree protected zones encroach on to the property.

A list of plant species observed as common or otherwise noteworthy on site is provided in Attachment B. The list is not intended to be exhaustive and more species may be found on site. Rather, the list is representative of the plant species characterizing the vegetation on site.

Wildlife

Observations of wildlife using the site and adjacent areas were made during the site investigation. These are listed in Attachment B along with other expected species. As a consequence of intensive site disturbance and the resulting non-native ruderal conditions, wildlife use of the site is expected to be extremely low and only then by a relatively few species. The status of the major wildlife taxonomic groups expected on site is described below.

No amphibians were observed or otherwise detected, and none are expected due to the dry, disturbed conditions.

Only one common reptile species was observed on site, as would be expected by the disturbed condition on the vegetation. Although several other reptile species are expected, particularly at the edges of dense chaparral stands along the property's southern edge, reptile populations on the property are expected to be extremely low in diversity and abundance.

A number of bird species characteristic of chaparral were observed or heard in the neighboring habitats. However, very few birds were observed using the site itself. Here, again, the disturbed conditions do not provide suitable habitat for most birds occurring in the area and few would be expected to frequent the site to meet habitat requirements.

The same is expected to be true for mammals. No observations of individuals or evidence of the presence of mammal species were made during the site visit; and, only a few species are expected. Both the abundance and diversity of mammals on site are expected to be extremely low, again, due to the undisturbed condition of most habitats on site.

Sensitive Species and Habitats

Non-native ruderal vegetation is not a sensitive habitat owing to its origin as a disturbance following vegetation and its being of very low habitat value to wildlife.

Plant communities are comprised of a wide array of plant species which often overlap several community types. Within the Santa Monica Mountains a number of these plant species are considered sensitive and have been assigned varying degrees of sensitivity by federal and State resource agencies and the California Native Plant Society (CNPS), depending on their rarity and threats to their habitats and populations. Twenty-five sensitive plant species were reported in the current edition of the CNPS Online Data Base from the Point Dume and surrounding USGS quadrangles. Of these 25 species, 10 do not have the potential to occur on site due to the absence of soil types/habitats capable of supporting them and/or their being known to be endemic to specific geographical localities far removed from the site (the reader should note that the nine quadrangle search encompassed a large geographical area). The remaining 15 species, however, can occur in mixed chaparral and have been reported from the Santa Monica Mountains. None of these species were observed on site and none would be expected due to the highly disturbed conditions present.

A wide range of invertebrates, fish, amphibians, reptiles, birds and mammals are known from the Santa Monica Mountains and surrounding region, a number of which have been given legal protected status or special status designations by federal and state wildlife agencies. Thirty-two special status animal species have been recorded within the Point Dume and surrounding eight USGS quadrangles. Due to the disturbed nature of the site, however, none of these species are expected to occur on site or otherwise use it to meet their habitat requirements.

As a taxonomic group, raptorial birds are also considered to be sensitive. In the absence of woodland vegetation or otherwise notable tree resources away from human disturbance, no nesting or significant roosting habitat is believed to exist on site. Although typically wide-ranging birds of prey may forage over the more open habitat on site, such habitats are limited in extent on site and in close proximity to existing areas of human activity. Therefore, the site is not believed to be particularly important to regional populations of this taxonomic group.

No federal or state-listed threatened or endangered plant or wildlife species were observed, are reported, or are expected to occur on site.

Status of SERA/ESHA On Site

The *Los Angeles County Malibu Local Coastal Program*, which is the land use regulatory program for the area, includes a Sensitive Environmental Resources Overlay Zones map that delineates "environmentally sensitive habitat areas" (ESHA), "significant watersheds", "wildlife migration corridors", "significant oak woodlands and savannahs, and other resource areas. According to the overlay, the property is not within an area designated as one of these designated SERA/ESHAs.

CHARACTERISTICS OF THE SURROUNDING AREA

Surrounding Land Uses

Existing land uses in the immediate vicinity of the site consist of single-family residential development scattered along Latigo Canyon Road. Immediately to the north, east and west, the property is bordered by developed parcels. The lot to the south is vacant..

Open Space Reserves in the Area

No designated or otherwise public lands abut the subject property or are within the vicinity (within one mile) of the property..

Regional Biological Value

In terms of its contribution to the regional diversity and abundance of plant and wildlife resources that occur in the Santa Monica Mountains, the property should be viewed in context. No regional resource conservation and/or management programs recognize the site as possessing significant biological value. However, the watershed area represented by the property, regardless of such designation, is important to the long-term sustainability of downstream water quality and riparian habitats. Therefore, although the site is not considered to have regional biological value, it is important within the context of watershed and downstream water quality management.

ANALYSIS OF CONSTRAINTS

As proposed, the proposed project is the proposed development of the subject property with a single-family residence. The total footprint will be between 1,600 and 1,700 square feet; the total height of the structure will not exceed 35 feet; there will be no grading as the house will be constructed on pilings; the landscaping will make use of indigenous plant materials with no invasives; and only minimal, low intensity lighting will be use. The analysis included below indicates constraints to be considered in the ultimate layout and design of the residence, some of which have already been incorporated into and addressed in the residence design and conservation guidelines outlined below.

Potential Impacts to Vegetation and Wildlife

Build out of the project will require clearing to construct building areas. The project will also require removal and thinning of existing vegetation for fuel modification. These activities will either eliminate or substantially compromise the existing form and function of vegetation within the development/fuel modification footprint. For the purpose of this assessment, these impacts would affect areas immediately to the south of the property since the site and areas to the north, east and west have already been disturbed.

The primary impacts of the project on wildlife will be the removal or disruption of habitat and the direct loss or displacement of wildlife, depending on a particular species' mobility. In either case, the result will be a net loss in localized wildlife populations.

In general, the loss of vegetation and wildlife as a result of the project is not expected to be significant. This is due to the previously disturbed and non-native character of most of the vegetation to be affected, the generally common and regionally-abundant nature of native vegetation and wildlife resources to be affected and, the relatively limited extent to which native vegetation and habitats will be directly or indirectly affected.

Potential Impacts to Sensitive Resources

As discussed above, no State or federal rare, endangered or threatened plant species were observed or are expected to occur on site. Therefore, no impacts to these "highest sensitivity" resources are expected. Similarly, no plant species generally considered of "high sensitivity" (for example, CNPS listed species) were observed or are expected on site. Therefore, no impacts to these resources are expected.

Similarly, no State or federal rare, endangered or threatened animal species were observed or are expected to occur on site. However, several species of concern to the resource agencies are expected; and, the project will result in an incremental loss of habitat suitable for them. It is estimated, based on a 200-foot fuel modification zone, that

on the order of one acre of mixed chaparral off site could be affected in this manner. Given the relatively wide distribution of this plant community in the region, this is not considered a potentially significant adverse impact associated with the project.

CONSERVATION GUIDELINES

The limited loss of non-native ruderal vegetation due to the project would be an unavoidable but less than significant consequence of the project that does not warrant conservation or mitigation measures. As mentioned above, however, this finding would be based on several assumptions related to the siting, design, and landscaping associated with the residences that will ultimately be built and occupied on the property. In addition, the project site should be viewed in the context of the local, State, and federal conservation programs being implemented in the Santa Monica Mountains, and should incorporate conservation measures to be consistent with region-wide goals and objectives. Such measures are outlined below in the form of conservation guidelines.

Siting of Residences

1. The clearing or thinning of mixed chaparral should be limited to that absolutely required for fuel modification in order to minimize the loss of native watershed, thereby protecting downstream habitat values and water quality.

Design of Residences

2. Exterior lighting within and around the residences should be restricted to low-intensity features that are low-lying, directed away from adjacent habitat areas and/or shielded.

3. Closed-style fencing should be limited to that necessary to enclose yard areas immediately surrounding the residence. All other property fencing should be open in structure to allow the easy passage of wildlife through the site.

Landscaping

4. Ornamental and decorative landscape plantings should be limited to the area immediately surrounding the residence and should emphasize plant palettes that require minimal irrigation so as to control and/or limit the ability of invasive plants and animals (such as the Argentine ant) to establish themselves on site. An appropriate and recommended source for plant palettes for this purpose would be the *Drought-Tolerant Perennial Plants Native to Los Angeles County & Surrounding Areas, Approved for Use in Landscaping and Revegetation, Master List* maintained by the Los Angeles County Department of Regional Planning.

5. Plant palettes for ornamental plantings should not include any species that are invasive, as listed in California Exotic Pest Plant Control's (CalEPPC) *Exotic Pest Plants*

of Greatest Concern in California (CalEPPC, October 1999).

6. All other landscaping/re-vegetation on site, to include areas of cut and fill and fuel modification zones, should be restricted to native species indigenous to the area. Such species should include native shrubs and grasses as permitted by applicable fire codes and regulations.

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ATTACHMENT A

Site Photographs

for

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View of property from Latigo Canyon Road looking southwest

View of property from the bottom looking Northeast towards Latigo Canyon Road.

West view from center of lot showing property and abutting residence

ATTACHMENT B

Plant and Wildlife Species Inventory

for

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Attachment B

PLANT AND WILDLIFE INVENTORY

Plants (* = non-native species)

Agavaceae - Agave Family

Yucca whipplei - chaparral yucca

Anacardiaceae - Sumac or Cashew Family

Malosma laurina - laurel sumac

Apiaceae - Carrot Family

Foeniculum vulgare - sweet fennel *

Asteraceae - Sunflower Family

Centaurea melitensis - tocolate *
Hazardia squarrosa - sawtooth goldenbush
Hemizonia fasciculata - common tarplant
Heterotheca grandiflora - telegraph weed *

Brassiceae - Mustard Family

Brassica nigra - black mustard *
Hirshfeldia incana - Mediterranean mustard *

Chenopodiaceae – Goosefoot Family

Salsola tragus – Russian thistle *

Convolvulaceae – Morning Glory Family

Convolvulus arvensis - bindweed

Fabaceae - Legume Family

Lotus scoparius - deerweed

Geraniaceae - Geranium Family

Erodium cicutarium - red-stemmed filaree *

Hydrophyllaceae - Waterleaf Family

Phacelia sp. - phacelia

Lamiaceae - Mint Family

Marrubium vulgare - horehound *
Salvia mellifera - black sage

Malvaceae - Mallow Family

Malva parviflora - cheeseweed *

Poaceae - Grass Family

Avena fatua – slender wild oat *
Bromus diandrus - ripgut grass *
Bromus madretensis - foxtail chess *

Polygonaceae - Buckwheat Family

Eriogonum cinereum - ashyleaf buckwheat

Rhamnaceae - Buckthorn Family

Ceanothus megacarpus - big-pod ceanothus

Roseaceae - Rose Family

Adenostoma fasciculatum - chamise

Wildlife (* = observed)

Reptiles

Sceloporus occidentalis - Great Basin fence lizard
Uma stansburiana - side-blotched lizard *
Masticophis lateralis - chaparral whipsnake
Pituophis melanoleucus - gopher snake

Birds

Zenaida macroura - mourning dove *
Geococcyx californicus - greater roadrunner
Calypte anna - Anna's hummingbird *
Tyrannus vociferous - western kingbird
Sayornis saya - Say's phoebe
Aphelocoma californica - western scrub jay *
Corvus brachyrynchos - American crow *
Corvus corax - common raven
Mimus polyglottos - northern mockingbird *
Pipilo crissalis - California towhee *
Zonotrichia leucophrys - white-crowned sparrow
Euphagus cyanocephalus - Brewer's blackbird
Molothrus ater - brown-headed cowbird
Carduelis psaltria - lesser goldfinch
Carpodacus mexicanus - house finch *

Mammals

Sylvilagus audubonii - Audubon's cottontail *
Thomomys bottae - valley pocket gopher *
Canis latrans - coyote *
Mephitis mephitis - stripped skunk
Odocoileus hemionus - mule deer *
Spermophilus beecheyi - California ground squirrel *
Dipodomys agilis - Pacific kangaroo rat *
Perognathus californicus - California pocket mouse
Peromyscus maniculatus - deer mouse